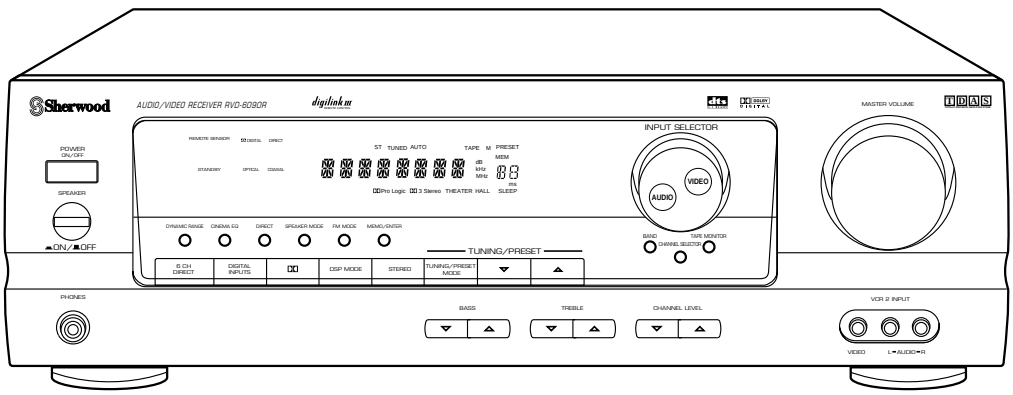
OPERATING INSTRUCTIONS

Sherwood



RVD-6090R

AUDIO/VIDEO RECEIVER

ENGLISH

UNPACKING AND INSTALLATION

Congratulations on Your Purchase!

Yourn new high fidelity receiver is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your unit and help ensure a trouble free installation. Please unpack your unit carefully. We recommend that you save the carton and packing material. They will be helpful if you ever need to move your unit and may be required if you ever need to return it for service. Your unit is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your unit for adequate ventilation and cabling convenience.

To avoid damage, never place the unit near radiators, in front of heating vents, in direct sunlight, or in excessively humid or dusty locations. Connect your complementary components as illustrated in the following section.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Caution : Do not block ventilation openings or stack other equipment on the top.

FOR U.S.A.

■ **Note to CATV System Installer:** This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

■ **FCC INFORMATION**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

READ THIS BEFORE OPERATING YOUR UNIT

FOR U.S.A. AND CANADA .....120 V

FOR YOUR SAFETY

Units shipped to the U.S.A. and Canada are designed for operation on 120 V AC only.

Observe all safety precautions with use of a polarized AC plug.
However, some products may be supplied with a nonpolarized plug.

CAUTION : *To prevent electric shock, match wide blade of plug to wide slot, fully insert.*

FOR EUROPE AND AUSTRALIA .....230 V/240 V

FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240 V AC only.
To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth.
Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.
PAN-EUROPEAN UNIFIED VOLTAGE
All units are suitable for use on supplies 230-240 V AC.

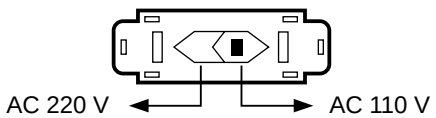
FOR OTHER COUNTRIES .....110 V/220 V

FOR YOUR SAFETY

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC VOLTAGE SELECTION
This unit operates on 110-220 V AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

ENGLISH

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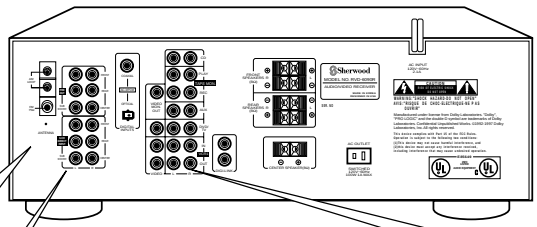
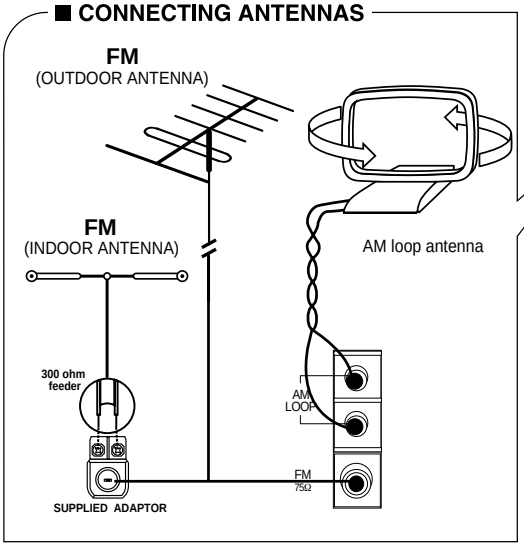
System Connections

ENGLISH

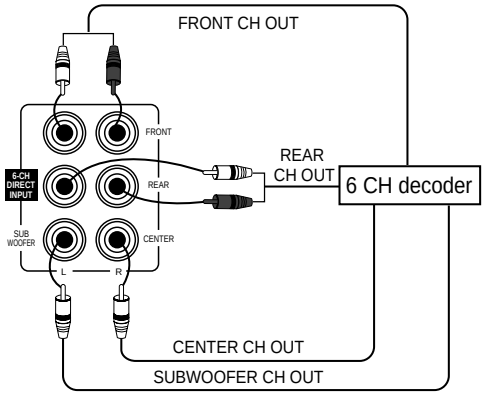
- Do not plug the AC input cord into the wall AC outlet until all connections are completed.
- Be sure to connect the white RCA cord to the L(left) and the red RCA cord to the R(right) jacks when making audio connections.
- Change the position of the FM indoor antenna until you get the best reception of your favorite FM stations.
- A 75 Ω outdoor FM antenna may be used to further improve the reception.
  Disconnect the indoor antenna before replacing it with the outdoor one.
- Place the AM loop antenna as far as possible from the receiver, TV set, speaker wires and the AC input cord.
  Point it in the direction that offers the best reception.
- If the reception is poor with the AM loop antenna, an AM outdoor antenna can be used in place of the AM loop antenna.
- Make connections firmly and correctly. If not, it can cause loss of sound, noise or damage to the receiver.
- If the electricity fails or the AC input cord is left unplugged for about 2 weeks, the memorized contents will be cleared.
  Should this happen, memorize them again.



■ CONNECTING ANTENNAS

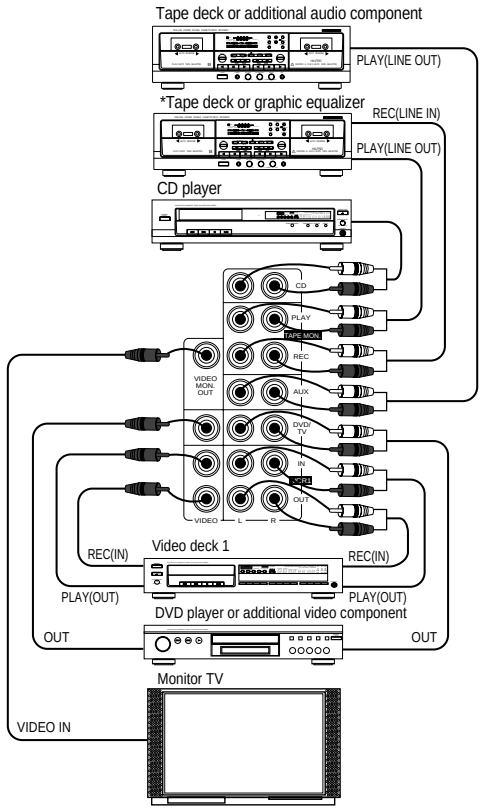


■ CONNECTING 6 CH DIRECT INPUTS



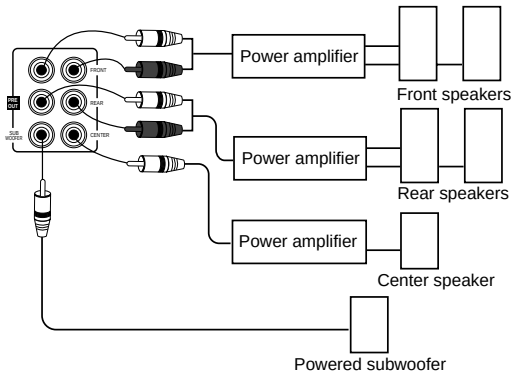
- Use these jacks to connect the corresponding analog outputs of 6 CH decoder or DVD player with 6 CH output for Dolby Digital or DTS, etc.☐
  (For details, see the operator's manual of the component to be connected.)

■ CONNECTING AUDIO/VIDEO COMPONENTS



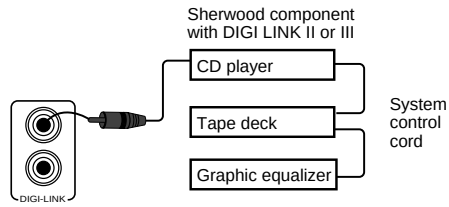
- The TAPE MONITOR PLAY/REC jacks may also be connected to the LINE OUT/IN jacks of an optional graphic equalizer.☐
- The DVD/TV jacks may also be connected to an additional video component such as a cable TV tuner or a video deck.

■ PRE OUT connections



- Use these jacks when adding additional amplifiers.
- Connect the PRE OUT jacks to the powered speakers or the power amplifiers connected to speakers respectively.
- To emphasize deep bass sounds, connect a powered subwoofer.

■ CONNECTING SYSTEM CONTROL



- Connect this jack to the DIGI LINK jack of the external Sherwood component that uses the DIGI LINK II or III remote control system.

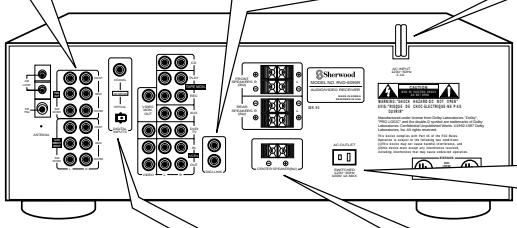
■ AC INPUT CORD

Plug this cord into a wall AC outlet.

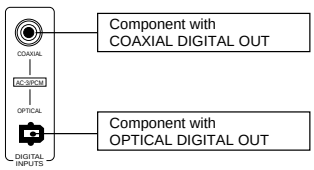
■ SWITCHED AC OUTLET

- This outlet is switched on(power on mode) and off(standby mode) according to power controls as follows(Maximum total capacity is 1A, 100W):

Standby mode – switched AC outlet off
Power on mode – switched AC outlet on

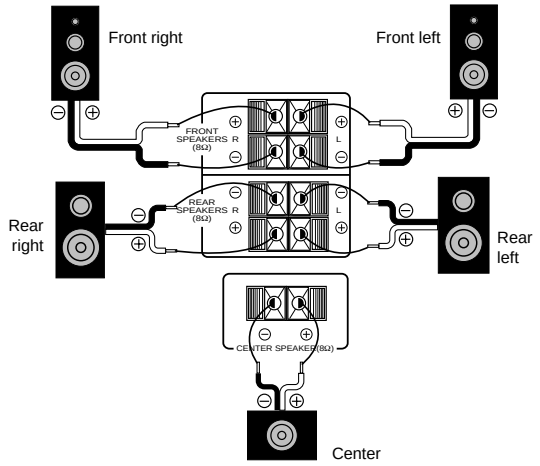


■ CONNECTING DIGITAL INPUTS



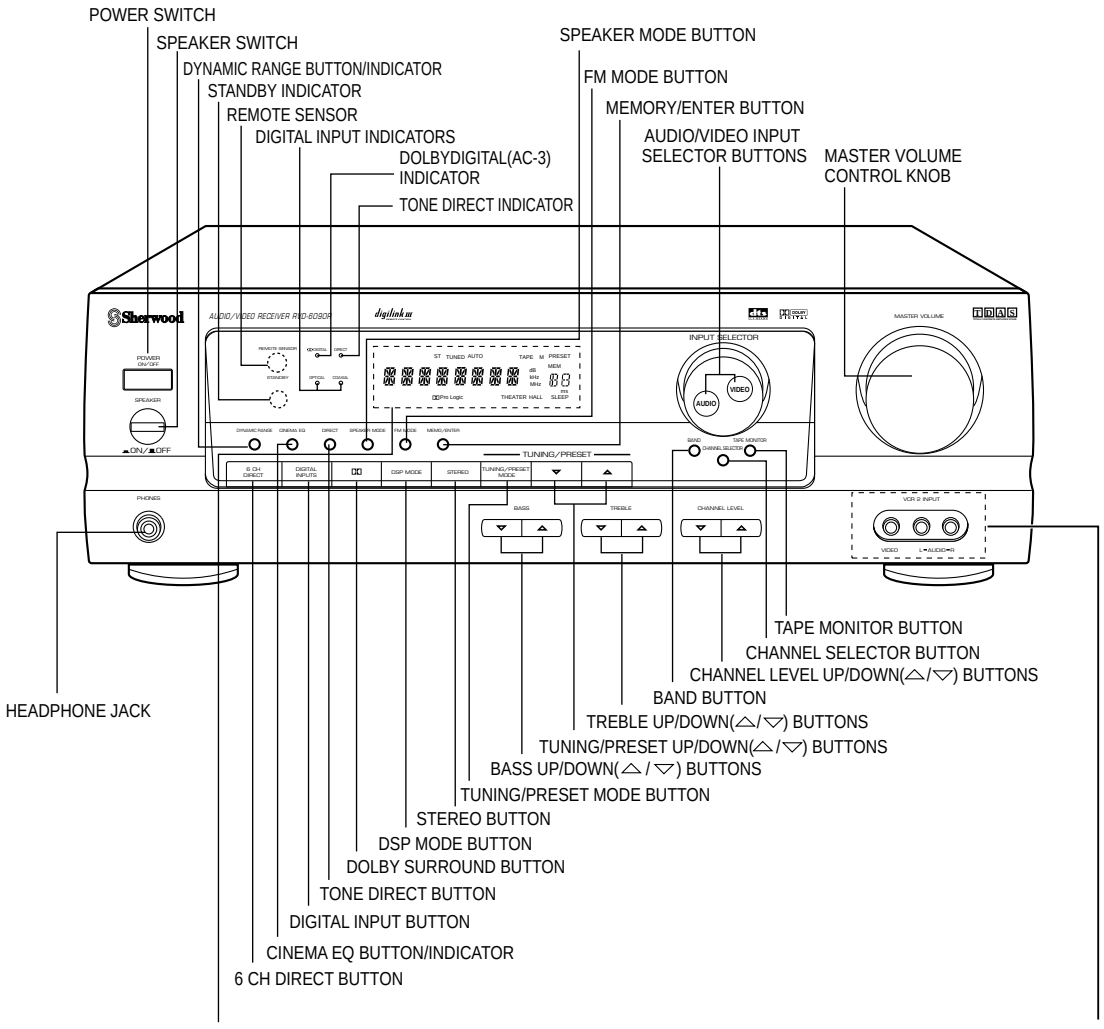
- The COAXIAL or the OPTICAL DIGITAL OUTs of the components that are connected to "CD", "VCR2" and "DVD/TV" of this unit can be connected to these DIGITAL INPUTS.
- A digital input should be connected to the components such as LD player, CD player or DVD, etc. capable of outputting Dolby Digital(AC-3) or PCM format digital signals.
- For details, refer to the operating instructions of the component connected.□
- When making the COAXIAL DIGITAL connection, be sure to use a 75Ω COAXIAL cord, not a conventional AUDIO cord.

■ CONNECTING SPEAKERS

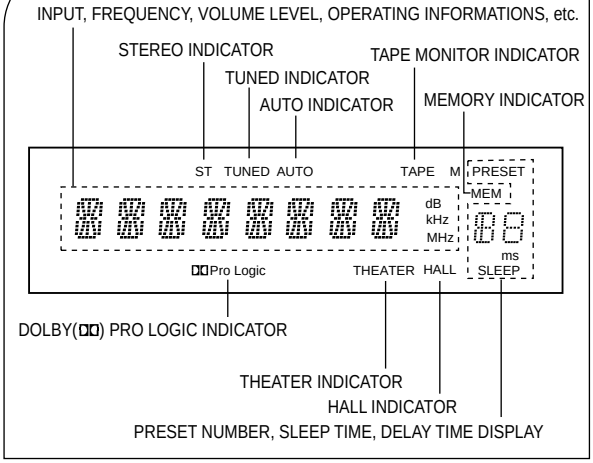


- Never short circuit the + and - speaker cords.□
- Be sure to connect speakers firmly and correctly according to the channel (left and right) and the polarity (+ and -).□
- Be sure to use the speakers with the impedance of over 8 Ω.□
- For installing the speakers, refer to "Speaker placement" on page 14.

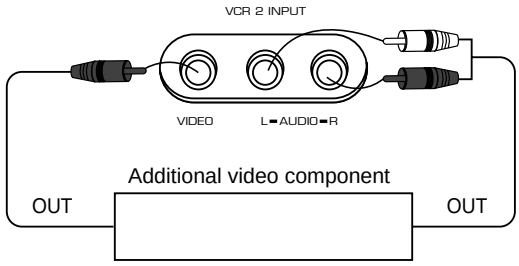
Front Panel Controls



■ FLUORESCENT DISPLAY



■ VCR 2 VIDEO/AUDIO INPUT JACKS

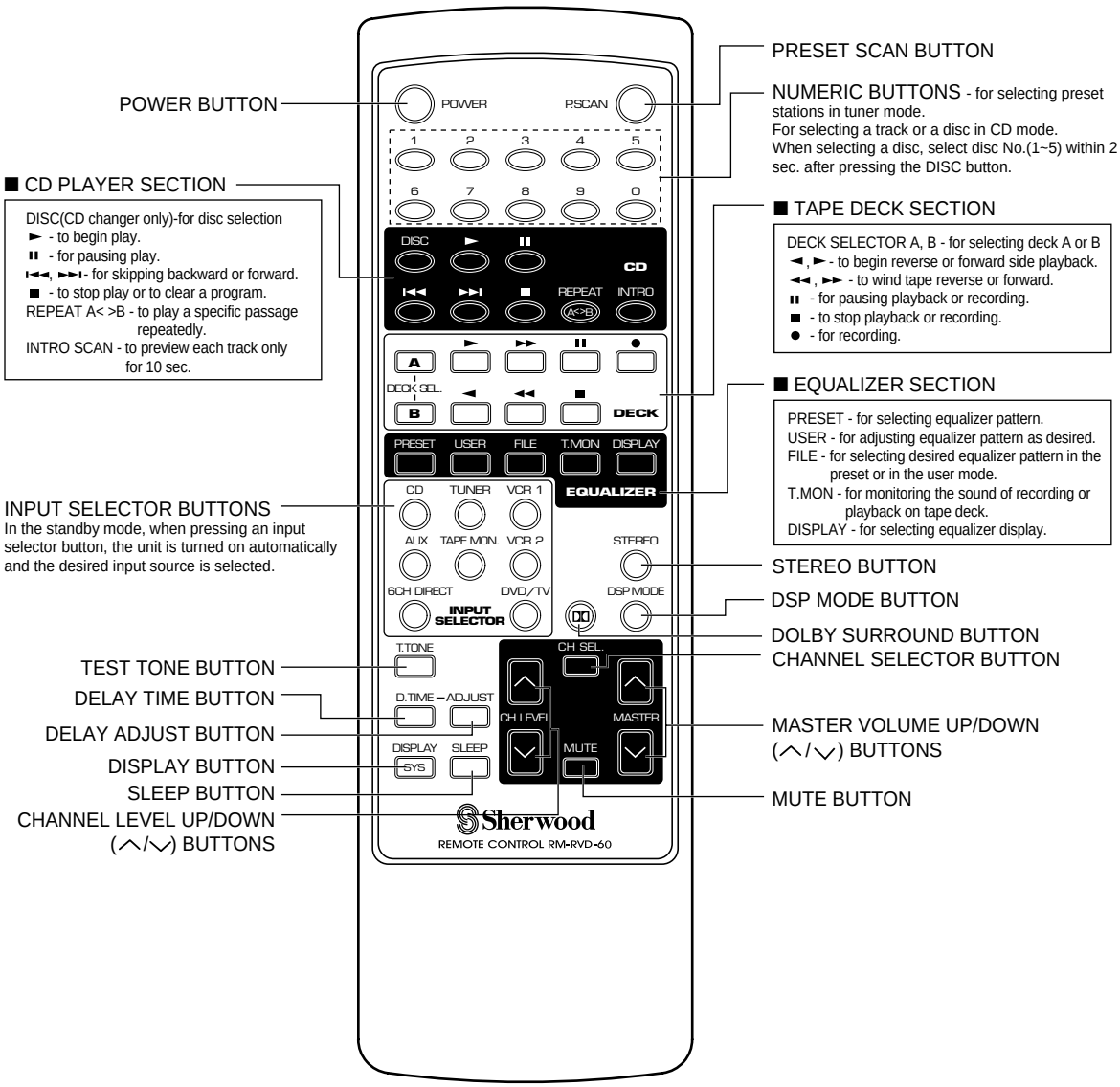


- The VCR 2 jack may also be connected to an additional video component such as a camcorder, a LD player or a video game player, etc.

DIGI LINK III System Remote Controls

ENGLISH

- You can remotely control not only this receiver but also Sherwood compatible components bearing the DIGI LINK II or III logo.
- For system remote control operation, first make the DIGI LINK connections.

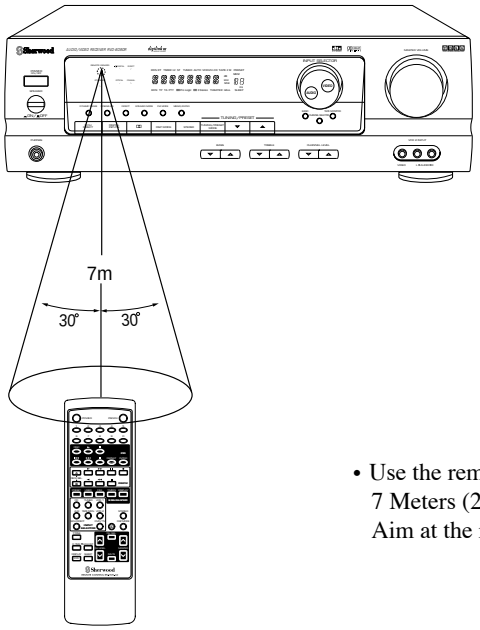

POWER BUTTON
■ CD PLAYER SECTION
DISC(CD changer only)-for disc selection
► - to begin play.
II - for pausing play.
I◄◄, ►►I - for skipping backward or forward.
■ - to stop play or to clear a program.
REPEAT A< >B - to play a specific passage repeatedly.
INTRO SCAN - to preview each track only for 10 sec.
INPUT SELECTOR BUTTONS
In the standby mode, when pressing an input selector button, the unit is turned on automatically and the desired input source is selected.
TEST TONE BUTTON
DELAY TIME BUTTON
DELAY ADJUST BUTTON
DISPLAY BUTTON
SLEEP BUTTON
CHANNEL LEVEL UP/DOWN (∧/∨) BUTTONS
POWER
P.SCAN
1 2 3 4 5
6 7 8 9 0
DISC
CD
REPEAT
INTRO
A
B
DECK SEL.
DECK
PRESET
USER
FILE
T.MON
DISPLAY
EQUALIZER
CD
TUNER
VCR 1
AUX
TAPE MON.
VCR 2
6CH DIRECT
DVD/TV
INPUT SELECTOR
STEREO
DSP MODE
T.TONE
D.TIME
ADJUST
DISPLAY
SYS
SLEEP
CH SEL.
CH LEVEL
MASTER
MUTE
Sherwood
REMOTE CONTROL RM-RVD-60
PRESET SCAN BUTTON
NUMERIC BUTTONS - for selecting preset stations in tuner mode.
For selecting a track or a disc in CD mode.
When selecting a disc, select disc No.(1~5) within 2 sec. after pressing the DISC button.
■ TAPE DECK SECTION
DECK SELECTOR A, B - for selecting deck A or B
◄, ► - to begin reverse or forward side playback.
◄◄, ►► - to wind tape reverse or forward.
II - for pausing playback or recording.
■ - to stop playback or recording.
● - for recording.
■ EQUALIZER SECTION
PRESET - for selecting equalizer pattern.
USER - for adjusting equalizer pattern as desired.
FILE - for selecting desired equalizer pattern in the preset or in the user mode.
T.MON - for monitoring the sound of recording or playback on tape deck.
DISPLAY - for selecting equalizer display.
STEREO BUTTON
DSP MODE BUTTON
DOLBY SURROUND BUTTON
CHANNEL SELECTOR BUTTON
MASTER VOLUME UP/DOWN (∧/∨) BUTTONS
MUTE BUTTON

- In the DIGI LINK III remote control system, if pressing PLAY, etc. on CD player or tape deck, CD or TAPE MONITOR is selected automatically without selecting the input source and then PLAY, etc. starts.

Notes:

- Some functions for CD player, tape deck or equalizer may not be available.
- For details about functions, refer to the operating instructions of each component.

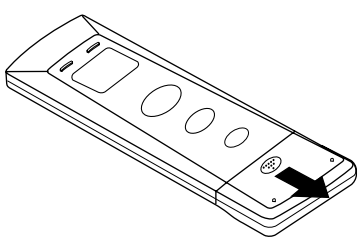
REMOTE CONTROL OPERATION RANGE



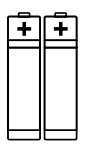
• Use the remote control unit within a range of about 7 Meters (23 feet) and angles of up to 30 degrees. Aim at the remote sensor.

LOADING BATTERIES

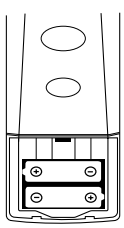
1 Remove the cover.



2 Load two batteries matching the polarity.



2 × 1.5V
("AAA" size)



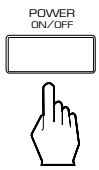
• Remove the batteries when they are not used for a long time.
• Do not use rechargeable batteries(Ni-Cd type).

ENGLISH

LISTENING TO A PROGRAM SOURCE

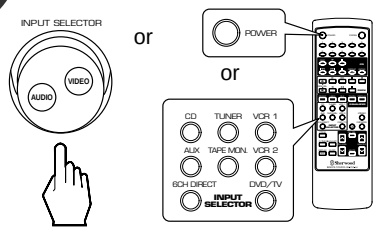
Before operation

• Enter the standby mode.



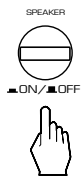
• The STANDBY indicator lights up. This means that the receiver is not disconnected from the AC mains and a small amount of current is retained to support the memorized contents and operation readiness.
• To switch the power off, push the POWER switch again.
• Then the power is cut off and the STANDBY indicator goes off.

1 In the standby mode, turn the power on.



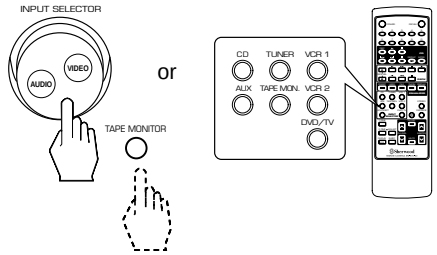
• Each time the POWER button on the remote control is pressed, the receiver is turned on to enter the operating mode or off to enter the standby mode.
• In the standby mode, if the INPUT SELECTOR button is pressed, the receiver is turned on automatically and the desired input is selected.

2 Switch the speakers on.



• Then sound can be heard from the speakers connected to the speaker terminals.
• When using headphones for private listening, press the SPEAKER switch again to switch the speakers off.

3 Select the desired input source.



• Each time the "AUDIO" button is pressed, the input source changes as follows;

→ TUNER → CD → AUX →
(frequency display)

• Each time the "VIDEO" button is pressed, the input source changes as follows;

→ VCR1 → VCR2 → DVD →

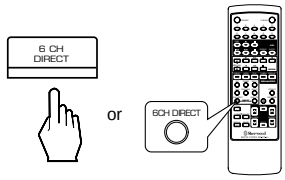
• When the TAPE MONITOR button is set to on so that "TAPE M" indicator lights up, other inputs can not be heard from the speakers.
To listen to a input source other than TAPE MONITOR, be sure to set the TAPE MONITOR button to off.

TAPE MONITOR function

You can connect either a tape deck or a graphic equalizer to the receiver's TAPE MONITOR jacks.
To listen to the component connected to these jacks, set the TAPE MONITOR button to on.
If you connect a 3-head tape deck, you can listen to the sound being recorded during recording, not the source sound.
For further details, refer to the operating instructions of the component connected.

■ When selecting the 6 CH DIRECT as desired,

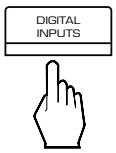
• "6-DIRECT" is displayed and the 6 separate analog signals from 6 CH decoder connected to this unit pass through the tone (bass, treble) and volume circuits only and directly transfer to the speakers. (In case that the TAPE MONITOR button is set to on, the TAPE MONITOR button is automatically set to off.)



• To cancel the 6 CH Direct function, press the 6 CH DIRECT button or select the desired input source.
• These 6 separate analog signals can be heard only, not recorded.

When CD, VCR2 or DVD is selected as input source

4 Select the digital or the analog input connected as desired.



- Each time this button is pressed, the corresponding input is selected as follows ;

  → OPTICAL → COAXIAL → ANALOG →

- To listen to Dolby Digital (AC-3) program source in the 2-CH downmix mode, in the stereo mode, the corresponding digital input should be selected. (For details, refer to "Downmixing into 2 front channels" on page 17)

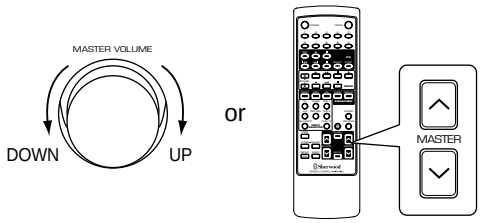
■ Notes:

- When the selected optical or coaxial digital input is not connected, the selected DIGITAL INPUT indicator is flickering, meaning no sound. (Refer to "ENJOYING SURROUND SOUND" on page 14.)
- The sound from the component connected to the selected digital input can be heard regardless of the selected input source.

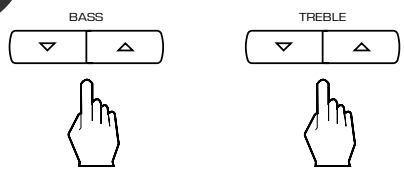
5 Operate the selected component for playback.

- When playing back the program sources with surround sound, refer to "ENJOYING SURROUND SOUND" on page 14.

6 Adjust the (over all) volume.



7 Adjust the tone (bass and treble).



■ Notes:

- Extreme settings at high volume may damage your speakers.
- In the Dolby Digital(AC-3) mode, the tone cannot be adjusted and the tone direct function is automatically switched to ON.

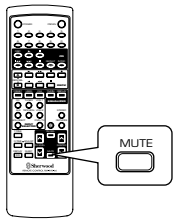
8 To listen to a program source without the tone effect.

- The TONE DIRECT indicator lights up and the sound bypasses the tone circuitry.
- To cancel the tone direct function, press this button again.

9 To compensate for edgy or shrill movie sound tracks.

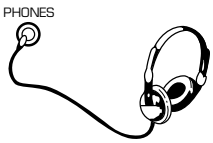
- Then the CINEMA EQ indicator lights up.
- Press it again to cancel.

10 To mute the sound.



- "MUTE" will flicker.
- To resume the previous sound level, press it again.

11 To listen with the headphones.



- Ensure that the SPEAKER switch is set to off.
- If headphones are plugged-in and the SPEAKER switch is set to off when listening to Dolby Digital(AC-3) program sources, the program automatically enters the 2-CH Downmix mode. (For details, refer to "Downmixing into 2 front channels"on page 17.)

SURROUND SOUND

• This receiver incorporates a sophisticated Digital Signal Processor that allows you to create optimum sound quality and sound atmosphere in your personal Home Theater.

Surround modes

This unit has 5 different surround modes to allow you to enjoy surround sound with various program sources: DOLBY DIGITAL(AC-3), DOLBY PRO LOGIC, THEATER, HALL 1, HALL 2.

DOLBY DIGITAL(AC-3) : Allows you to enjoy up to 5.1 channels of digital surround sound from Dolby Digital(AC-3) program sources bearing the " DOLBY DIGITAL " trademark such as laser discs.
Dolby Digital(AC-3) provides better sound quality, improved dynamic range and great sense of direction, compared with conventional Dolby surround. Now, you are able to enjoy real Home Theater sound in your home.

DOLBY PRO LOGIC : This unit incorporates the Dolby Pro Logic Surround Decoder which has the same functions for playback as movie theaters and gives a theater- like experience in your home, naturally reproducing the audio sound field.Use with Dolby Pro Logic program sources bearing the " DOLBY SURROUND " trademark such as video cassette tapes or laser discs.

• Manufactured under licence from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. © 1992-1997 Dolby Laboratories, Inc. All rights reserved.

THEATER : This mode provides the effect of being in a movie theater when watching a movie source that has a stereo sound track.

HALL 1 : This mode provides the ambience of a concert hall for classical music sources such as orchestral, chamber music or an instrumental solo.

HALL 2 : This mode provides an expansive sound field. For music sources like a rock concert, you will feel as if you were actually at the live concert.

• When the 6 CH DIRECT INPUTS are connected to a 6 CH decoder for surround sound such as Dolby Digital(AC-3) or DTS, etc., you can enjoy the corresponding surround sound, too.(For details, see the operator's manual of the component to be connected.)

• "DTS" and DTS Digital Surround are trademarks of Digital Theater Systems, Inc.

dts 5.1 READY

Delay time

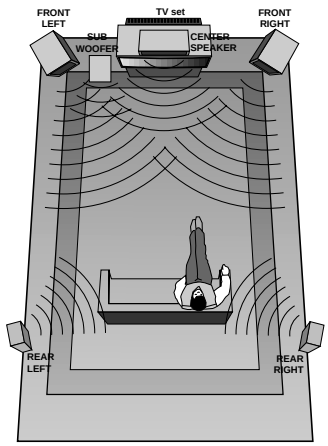
When the center speaker or the rear speakers is(are) closer to the listener than the front speakers, the sound from the center speaker or the rear speakers can arrive at the listener's ear earlier than the sound from the front speakers. In this case, the imaging is not as sharp and stable as it could be.
For audible improvement, the sound from center speaker can be delayed with the center delay time setting so that the sound from the front and the center speakers will be heard at the same time and the sound from the rear speakers can be also delayed with the rear delay time setting so that the sound from the front and the rear speakers will be heard at the same time.
The optimum delay time will be different according to the room size and the acoustic properties. It is recommended that you try different times to obtain the best effect.

• It is adjustable in the surround modes except for the normal stereo mode. (For details, refer to "In the surround modes except for the normal stereo mode, adjusting delay times of the speakers" on page 17)

Speaker placement

To obtain the best surround sound effect in your home, place the speakers as follows;

- Front speakers: Place each front speaker about 1m (40″) from the TV set.
- Center speaker: Place the center speaker either above or below the TV set to assure good visualization of center channel program.
- Rear speakers: Place the rear speakers approximately 1m above the ear level of a seated listener on the direct left and right of them or slightly behind.
- Subwoofer: Reproduces powerful deep bass sounds. Place a powered subwoofer anywhere in the front as desired.
- The ideal surround system needs all the speakers listed above. However, if you don't have a center speaker, a subwoofer or rear speakers, select the best possible surround mode with the available speakers.
- To enjoy the surround sound best, the speakers to be connected are as follows;



Modes	Dolby Digital(AC-3)	Dolby Pro Logic	Other Surround	Stereo	6 CH DIRECT
Front	Yes	Yes	Yes	Yes	Yes
Center	Yes	Yes	Optional	-	Yes
Rear	Yes	Yes	Yes	-	Yes
Subwoofer	Yes	Optional	Optional	Optional	Yes

- If a DTS Decoder is connected to the 6 CH DIRECT INPUTS, the most accurate reproduction requires that front, center and surround speakers all be full range speakers.

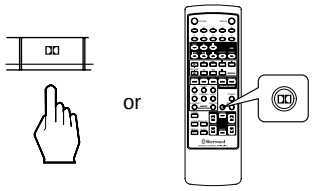
Note:To avoid interference with the TV picture, use only magnetically shielded center and front speakers.

ENJOYING SURROUND SOUND

- Surround sound effect will not work properly if the signal passes through a graphic equalizer. Please refer to your equalizer operating instructions for guidance on switching off (or defeating) the equalizer.

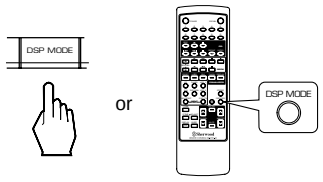
1 Select the desired surround mode.

■ When selecting the Dolby Surround mode.



- When playing either DVD software ,etc. bearing the " DOLBY DIGITAL " trademark or video, DVD or LD software,etc. bearing the " DOLBY SURROUND " trademark, the Dolby Digital(AC-3) mode or the Dolby Pro Logic mode is automatically selected to according to the input signal.
- When playing Dolby Digital(AC-3) program sources encoded in the 2 channel format, either the Dolby Pro Logic mode or the Dolby Digital(AC-3) mode will be automatically selected based on the encoding process. (If the Dolby Digital(AC-3) mode is automatically selected, pressing the DOLBY SURROUND button will select the Dolby Pro Logic mode.)
- To enjoy the Dolby Digital mode, be sure that the program source and the corresponding digital input are selected correctly. If not, no sound will be heard.

■ When selecting a surround mode among THEATER, HALL 1 and HALL 2 modes.

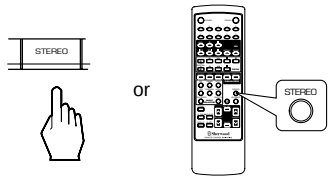


- Each time the DSP MODE button is pressed, the surround mode changes as follows;

→ THEATER → HALL 1 → HALL 2 ┐

- Playing Dolby Surround program sources, (bearing the " DOLBY DIGITAL " or the " DOLBY SURROUND " trademarks) in THEATER, HALL 1 or HALL 2 modes, may produce better surround effects.
- When the 6 CH DIRECT is selected as input source, the surround mode cannot be selected.

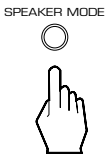
■ When canceling the surround mode for normal stereo operation.



Adjusting the speaker settings

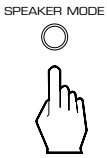
- Adjusting the settings of front, center ,rear speakers, and subwoofer connected.
- If the speaker setting is adjusted to “S”, the low range bass sound of the channel(s) is redirected to the subwoofer or the front channels and if the speaker setting is adjusted to “N”, the sound of the channel(s) is redirected to other channels.

2 Press the SPEAKER MODE button for more than 2 seconds to enter the front-center-rear speaker mode.



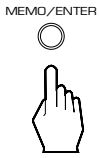
- The front-center-rear speaker setting is displayed.
- When the 6 CH DIRECT is selected as input source or “ANALOG” is selected as signal input in the stereo mode, the speaker mode function is not available.

3 Select the desired speaker setting.



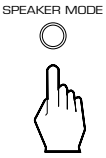
- Each time this button is pressed, one of 11 different speaker settings are selected and displayed for 8 seconds as follows;
  FL--CS--RS, FL--CL--RS, FL--CL--RL, FL--CL--RN, FL--CS--RL, FL--CN--RL, FL--CS--RN, FL--CN--RS, FS--CS--RS, FS--CS--RN and FS--CN--RS
- In the displays, F stands for Front, C for Center, R for Rear, L for Large, S for Small and N for None.
- When judging whether a speaker is Large or Small, please note that a standard large speaker has a cone size larger than 12 cm(5 inches).
- The following speaker settings cannot be selected. Front :Small, Center : Large and Rear : Large(FS--CL--RL) or Center : None and Rear : None(CN--RN) setting.

4 Memorize the desired speaker setting while it is displayed.



- The desired speaker setting is memorized and then it enters the subwoofer mode.
- If the speaker setting display disappears, start from step 2 above, again.

5 Select the desired subwoofer setting.

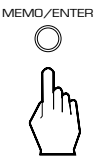


- Each time this button is pressed, the subwoofer setting changes and is displayed for 8 seconds as follows;

  SUB W(oofer) -- Y(es): When using a subwoofer.
  SUB W(oofer) -- N(o) : When not using a subwoofer.

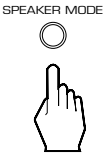
- In case that the front speaker is set to “S”, the subwoofer is automatically set to “Y”.

6 Memorize the subwoofer setting while it is displayed.



- If the subwoofer setting display disappears, start from step 2 above, again.

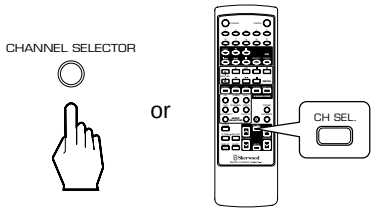
Checking the speaker setting



- Each time this button is pressed briefly, the front-center-rear speaker or subwoofer setting is displayed.

Adjusting each channel level

7 Select the desired channel.

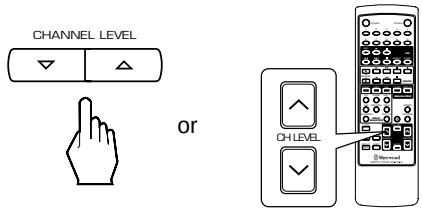


- Each time this button is pressed, the corresponding channel is selected and displayed for 3 seconds as follows;

  → Front Left → Center → Front Right →
  ← SubWoofer ← Rear Left ← Rear Right ←

- When in the normal stereo mode or when a speaker setting is “N”, the center, rear or subwoofer are not available.

8 Adjust the level of the selected channel as desired.



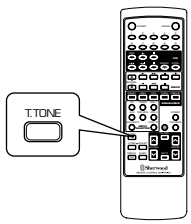
- If the channel display disappears, start from the above step 7 again.

9 Repeat the above steps 7 and 8 to adjust other channel levels.

In Dolby Digital (AC-3) or Dolby Pro

- In these modes, the volume level of each channel can be adjusted easily with the test tone function.

10 Enter the test tone mode.



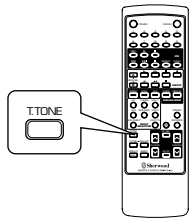
- The test tone will be heard from the speaker of each channel for 2 seconds as follows;

  → Front Left → Center → Front Right →
  ← SUB woofer ← Rear Left ← Rear Right ←

- When the speaker setting is “N”, the test tone of the corresponding channel is not available.

11 Do the steps 7 to 9 in “Adjusting each channel level” until the sound level of each speaker is heard to be equally loud.

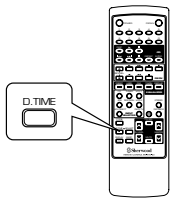
12 Cancel the test tone function.



In the surround modes except for the normal stereo mode, adjusting

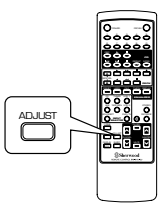
- When the distances from the prime listening position to front left, center, front right, rear left and rear right speakers are same, the basic settings are as follows according to the surround modes;
  -In the Dolby Digital(AC-3) mode
  Center delay time : 0 ms, Rear delay time : 0 ms
  -In the Dolby Pro Logic, Theater, Hall 1 and Hall 2 modes
  Rear delay time : 15 ms
- If the center or the rear speaker(s) is(are) not at the same distance from the prime listening position as the front speakers, increase or decrease the center delay time by 1 ms for every about 30 cm(1 foot) it is closer or farther away and increase or decrease the rear delay time by 5 ms for every about 1~1.5 m(3~5 feet) it is closer or farther away.

13 Check the delay time to be adjusted.



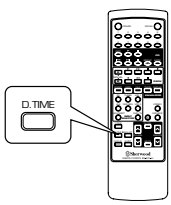
- The delay time will be displayed for 5 seconds.
- The corresponding delay time is displayed. The center delay time can only be adjusted in the Dolby Digital (AC-3) mode.
- When playing Dolby Digital (AC-3) program sources in the THEATER, HALL 1 or HALL 2 modes, the center and rear delay times can be adjusted just as they are in the Dolby Digital (AC-3) mode.

14 Adjust the delay time.



- Each time this button is pressed, the delay time changes in regular intervals.
- If the delay time disappears, start from the step 13 again.

15 Memorize the delay time.

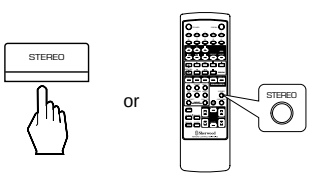


- The rear delay time can be memorized without pressing the DELAY TIME button.

16 In Dolby Digital(AC-3) mode, repeat the above steps 14 and 15 to adjust the rear delay time.

Downmixing into 2 front channels

- Allows the multi-channel Dolby Digital(AC-3) signal to be reproduced through only two speakers or through headphones.
- When playing the Dolby Digital(AC-3) program sources, press the STEREO button.

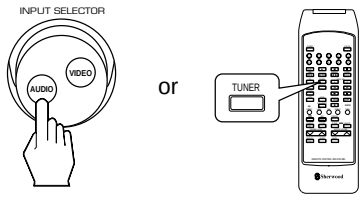


- "ST" and the Dolby Digital(AC-3) indicators light up, meaning it enters the 2-CH downmix mode, and then the 5 discrete channels(front L, center, front R, rear L and rear R) are mixed down to 2 front channels.
- To cancel the 2-CH downmix mode, select the desired surround mode.
- When play is stopped or interrupted, etc., the 2-CH downmix mode is not canceled even though "ST" and the Dolby Digital(AC-3) indicators goes off.
- If the headphones are plugged and the SPEAKER switch is set to off while playing the Dolby Digital (AC-3) program sources, it will enter the 2-CH downmix mode automatically(but only the Dolby Digital(AC-3) indicator lights up still) and if the headphones are unplugged and the SPEAKER switch is set to on in the 2-CH downmix mode, it will return to the previous mode.

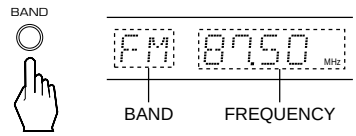
LISTENING TO RADIO BROADCASTS

Auto tuning

1 Select the tuner.

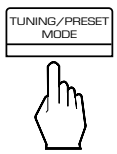


2 Select the desired band.



- Each time this button is pressed, the band is changed to FM or AM.
- Pressing the BAND button without first selecting TUNER, will automatically select the tuner.

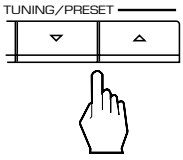
3 Select the tuning mode.



- Each time this button is pressed, the mode changes as follows;

  → Tuning mode : "PRESET" goes off. ┐
  └ Preset mode : "PRESET" lights up. ←┘

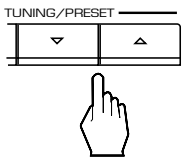
4 Press the TUNING/PRESET UP(△) or DOWN(▽) button for more than 0.5 second.



- Then "AUTO" appears on the display. The tuner will now search until a station of sufficient strength has been found. The display shows the tuned frequency and "TUNED".
- If the station found is not the desired one, simply repeat this operation.
- Weak stations are skipped during auto tuning.

Manual tuning

- Manual tuning is useful when you already know the frequency of the desired transmitter.
- Perform the steps 1~3 in "Auto tuning" procedure and press the TUNING/PRESET UP(△) or DOWN(▽) button repeatedly until the right frequency has been reached.

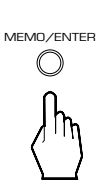


Presetting radio stations

- You can store up to 30 preferred stations in the memory.

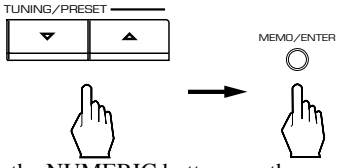
1 Tune in the desired station with auto or manual tuning.

2 Press the MEMORY/ENTER button.



- "MEM" is flickering for 5 seconds.

3 Select the desired preset number (1~30) and press the MEMORY/ENTER button.



- When using the NUMERIC buttons on the remote control.
  Examples)
  For "3" : 3
  For "15" : 1 within 2 seconds 5
- The station has now been stored in the memory.
- When using the NUMERIC buttons, the station is stored automatically without the MEMORY/ ENTER button.
- A stored frequency is erased from the memory by storing another frequency in its place.
- If "MEM" goes off, start again from the above step 2.

4 Repeat the above steps 1 to 3 to memorize other stations.

■MEMORY BACKUP FUNCTION

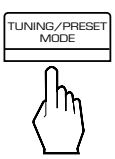
The following items, set before the receiver is turned off, are memorized.

- INPUT SELECTOR settings
- Surround mode settings
- Preset stations,etc.

Note : If the electricity fails or the AC input is disconnected for about 2 weeks, all memorized functions will be lost and must be memorized again.

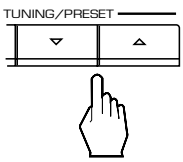
Tuning to preset stations

1 After selecting the tuner as input source, select the preset tuning mode.



- Then "PRESET" lights up.

2 Select the desired preset number.



- When using the NUMERIC buttons on the remote control.
  Examples)
  For "3": 3
  For "15": 1 within 2 seconds 5
- When selecting the desired preset number with the NUMERIC buttons, the desired preset station will be tuned to automatically without and selecting the preset tuning mode.

Listening to FM stereo broadcasts

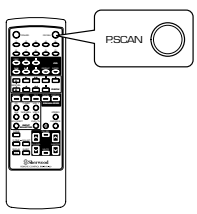
- While listening to FM broadcasts.

- Each time this button is pressed, the FM mode changes as follows;

  → Stereo mode : "ST" lights up.
  └ Mono mode : "ST" goes off. ←

- When FM stereo broadcasts are poor because of weak broadcast signals, select the FM mono mode to reduce the noise, then FM broadcasts are reproduced in monaural sound.

Scanning preset stations in sequence



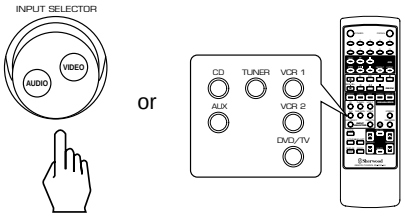
- The receiver will scan the stations in preset sequence and each station will be heard for 5 seconds.
- At the desired station, press this button again to stop scanning.

RECORDING

- The analog signals from the 6 CH DIRECT inputs as well as the digital signals from the coaxial or optical digital input can be heard but cannot be recorded.
- The volume and tone (bass, treble) settings, etc. have no effect on the recording signals.

Recording with TAPE MONITOR

1 Select the desired input as recording source except for TAPE MONITOR.



- Be sure that "TAPE M" goes off.

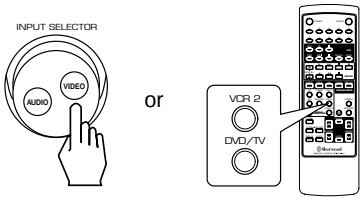
2 Start recording on the Tape Deck connected to the TAPE MONITOR input.

3 Start play on the desired input.

- For tape monitor function, refer to "TAPE MONITOR function" on page 10.

Dubbing from video components onto VCR 1

1 Select VCR 2 or DVD as recording source.



2 Start recording on the VCR 1.

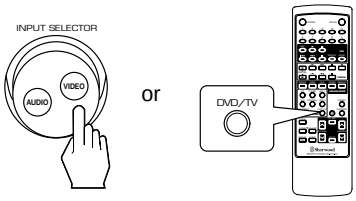
3 Start play on the VCR 2 or the DVD.

- The audio and video signals from the VCR 2 or the DVD will be dubbed onto the VCR 1 and you can enjoy them on the TV set and from the speakers.

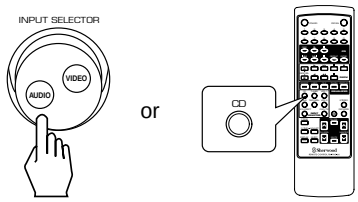
Dubbing the audio and video signals separately onto VCR 1

Example) When dubbing the DVD video signal and the CD audio signal separately onto VCR 1.

1 Select DVD as video recording source.



2 Select CD as audio recording source.



3 Start recording on the VCR 1.

4 Start play on the DVD and the CD respectively.

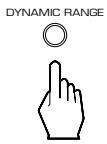
- The audio signal from the CD and the video signal from the DVD will be dubbed and you can enjoy them on the TV set and from the speakers.

Note : Be sure to observe the order of the above steps 1 and 2.

OTHER FUNCTIONS

Compressing the dynamic range (Dolby Digital(AC-3) mode only)

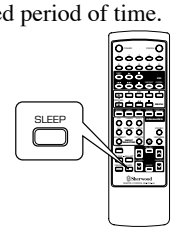
- This function compresses the dynamic range of previously specified parts of the Dolby Digital(AC-3) sound track(with extremely high volume) to minimize the difference in volume between the specified and non-specified parts.
  This makes it easy to hear all of the sound track when watching movies at night at low levels.



- Then the DYNAMIC RANGE indicator lights up.
- Press again to cancel.
- In some Dolby Digital(AC-3) software, this function may not be available.

Operating the sleep timer

- The sleep timer allows the system to continue to operate for a specified period of time before automatically shutting off.
- To set the receiver to automatically turn off after the specified period of time.

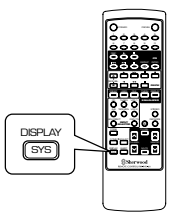


- Each time this button is pressed, the sleep time changes as follows;

→ 10 → 20 → 30 → 60 → 90 → OFF ┐
Unit : minutes

- When the sleep time is selected, all display panels of Sherwood components connected by the DIGI LINK III are dimly lit.

Adjusting the brightness of the fluorescent displays



- Each time this button is pressed, the brightness of all fluorescent displays of Sherwood components by the DIGI LINK III changes together as follows;

→ ON → dim → OFF

- In the display OFF mode, pressing any button will restore the display ON mode.

Troubleshooting Guide

ENGLISH

If a fault occurs, run through the table below before taking your receiver for repair.
If the fault persists, attempt to solve it by switching the receiver off and on again. If this fails to resolve the situation, consult your dealer. Under no circumstances should you attempt to repair the receiver yourself. This could void the warranty.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	• The AC input cord is disconnected. • Poor connection at AC wall outlet or the outlet is inactive.	• Connect cord securely. • Check the outlet using a lamp or another appliance.
No sound	• The speaker cords are disconnected. • The master volume is adjusted too low. • The MUTE button on the remote control is pressed to ON. • Speakers are not switched on. • Incorrect selection of input source. • Incorrect connections between the components.	• Check the speaker connections. • Adjust the master volume. • Press the MUTE button to cancel the muting effect. • Press the SPEAKER switch to ON. • Select the desired input source correctly. • Make connections correctly.
No sound from the rear speakers	• Surround mode is switched off(normal stereo mode). • Master volume and rear level are too low. • Monaural source is used. • Rear speaker setting is “N”.	• Select a surround mode. • Adjust master volume and rear level. • Select a stereo or surround source. • Select the desired rear speaker setting.
No sound from the center speaker	• Surround mode is switched off(normal stereo mode). • Center speaker setting is “N”. • Master volume and center level are too low.	• Select the desired surround. • Select the desired center speaker setting. • Adjust master volume and center level.
Stations cannot be received	• No antenna is connected. • The desired station frequency is not tuned in. • Antenna is in wrong position.	• Connect an antenna. • Tune in the desired station frequency. • Move antenna and retry tuning.
Preset stations cannot be received	• An incorrect station frequency has been memorized. • The memorized stations are cleared.	• Memorize the correct station frequency. • Memorize the stations again.
Poor FM reception	• No antenna is connected. • The antenna is not positioned for the best reception.	• Connect an antenna. • Change the position of the antenna.
Continuous hissing noise during FM reception, especially when a stereo broadcast is received.	• Weak signals.	• Change the position of the antenna. • Install an outdoor antenna.
Continuous or intermittent hissing noise during AM reception, especially at night.	• Noise is caused by motors, fluorescent lamps or lightning, etc.	• Keep the receiver away from noise sources. • Install an outdoor AM antenna.
Remote control unit does not operate.	• Batteries are not loaded or exhausted. • The remote sensor is obstructed.	• Replace the batteries. • Remove the obstacle.
Other system components do not react to remote control commands.	• DIGI LINK connections are not made properly.	• Make proper DIGI LINK connections.

Specifications

■ AMPLIFIER SECTION

- Power output, stereo mode, 8 Ω, THD 0.2%, 40 Hz~20 kHz ..... 2 × 60 W
- Total harmonic distortion, 8 Ω, 60 W, 1 kHz 0.09%
- Intermodulation distortion
  60 Hz : 7 kHz= 4 : 1 SMPTE, 8 Ω, 60 W 0.1%
- Input sensitivity, 47 kΩ
  Line (CD, TAPE, VCR) ..... 200 mV
- Signal to noise ratio, IHF "A" weighted
  Line (CD, TAPE, VCR) ..... 92 dB
- Frequency response
  Line (CD, TAPE, VCR), 20 Hz~50 kHz ..... +0 dB, -3 dB
- Output level
  TAPE REC, 2.2 kΩ ..... 200 mV
  PRE OUT(Front, Center, Rear, Subwoofer), 1 kΩ ..... 1.0 V
- Bass/Treble control, 100 Hz/10 kHz ..... ±10 dB
- Surround mode, only channel driven
  Front power output, 8 Ω, 1 kHz, THD 0.7 % ..... 65 W+65 W
  Center power output, 8 Ω, 1 kHz, THD 0.7 % ..... 65 W
  Rear power output, 8 Ω, 1 kHz, THD 0.7 % ..... 65 W+65 W

■ DIGITAL AUDIO SECTION

- Sampling frequency ..... 32, 44.1, 48 kHz
- Digital input level
  Coaxial, 75 Ω ..... 0.5 Vp-p
  Optical, 660 nm ..... -15~-21 dBm

■ FM TUNER SECTION

- Tuning frequency range ..... 87.5~108 MHz
- Usable sensitivity, THD 3%, S/N 30 dB ..... 14.2 dBf
- 50 dB quieting sensitivity, mono/stereo ..... 20.2/45.3 dBf
- Signal to noise ratio, 65 dBf, mono/stereo ..... 70/65 dB
- Total harmonic distortion, 65 dBf,1 kHz, mono/stereo 0.5/0.8%
- Frequency response, 30 Hz~15 kHz ..... ±1.5 dB
- Stereo separation, 1 kHz ..... 45 dB
- Capture ratio ..... 1.25 dB
- IF rejection ratio ..... 40 dB

■ AM TUNER SECTION

- Tuning frequency range ..... 520~1710 kHz
- Usable sensitivity ..... 500 μV/m
- Signal to noise ratio, 80 dB/m ..... 40 dB
- Selectivity ..... 25 dB

■ GENERAL

- Power supply ..... AC 120 V, 60 Hz
- Power consumption ..... 2.1 A
- Switched AC outlet ..... TOTAL 1 A, 100 W max.
- Dimensions (W × H × D) ..... 440 × 125 × 330 mm(17-3/8 × 4-15/16 × 13 inches)
- Weight (Net) ..... 10 kg(22 lbs)

Note: Design and specifications are subject to change without notice for improvements.

O P E R A T I N G I N S T R U C T I O N S

Sherwood

RVD-6090R

AUDIO/VIDEO
RECEIVER

5707-04707-001-0